

**REMARKS**

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. § 1.116, and in light of the remarks which follow, are respectfully requested.

In the present Amendment, claim 4 has been amended to recite that “said polyester resin (G) is obtained by mixing by melting and kneading 60~97 weight parts of a polyester type resin (A2) ...; 40~3 weight parts of epoxy group containing styrene type resin (B2)....” These amendments are supported by the specification, for example, page 17, lines 4-10; page 25, lines 3-6; and Examples, particularly, Examples 15 and 17. Claims 1, 3, 7 and 8 have been canceled. Claims 2 and 5 were previously canceled. No new matter has been added.

Applicants respectfully submit that entry of the amendments, after final, is proper, at least because they place the application either in condition for allowance or in better form for appeal. See M.P.E.P. § 714.12. Upon entry of the Amendment, claims 4, 6 and 9 will be all of the claims pending in the present application.

**I. Response to Rejections under 35 U.S.C. § 103**

a. Claims 1, 4 and 6-9 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over JP 2000-029247 to Nakanishi et al. (JP ‘247) in view of U.S. Patent No. 5,665,510 to Hattori. Applicants respectfully submit that the rejection of claims 1, 7 and 8 is moot because claims 1, 7 and 8 have been canceled. Further, Applicants respectfully submit that claims 4, 6 and 9 as amended are patentable over JP ‘247 in view of Hattori for at least the following reasons.

Independent claim 4 recites, a binder resin for toner contains a polyester resin (G), which is obtained by mixing by melting and kneading:

60 to 97 weight parts of a specific polyester type resin (A2);

40 to 3 weight parts of a specific epoxy group containing styrene type resin (B2);  
1 to 13 weight parts, based on total 100 weight parts of the polyester type resin (A2)  
and the epoxy group containing styrene type resin (B2), of wax; and  
0.1 to 2.5 mole equivalents of polyisocyanate (D2) as the isocyanate group for total  
hydroxyl value 1 mole equivalent of polyester type resin (A2).

The present specification demonstrates that the polyester resins obtained by the  
recited process are superior to those obtained by processes which do not meet the recitations  
of claim 4. Specifically, as shown in Tables 1-10 of the present specification, Examples 2, 3,  
5-8, 10 and 12-29, which were prepared by the processes as recited in present claim 4,  
provided superior results in terms of the balance of fixing properties, offset-resistant  
properties and storage (or blocking resistant) properties, as well as environmental stability,  
compared to Comparative Examples 1-7, Reference Examples 1-10 and Examples 1, 4, 9 and  
11, which were prepared by processes not meeting the recitations of claim 4. It is noted that  
the storage properties correspond to blocking resistant properties (page 3, lines 13 to 14).

Further, the present specification describes at page 2, lines 7 to 3 from the bottom,  
that the amount of the polyester resin (A2) (and the styrene resin (B2)) is related to the  
environmental stability. In particular, when the amount of the polyester resin (A) is too high,  
the environmental stability is inadequate. Therefore, it is believed that Examples 15 to 25  
described in the present specification should exhibit excellent properties in terms of  
environmental stability, compared to Examples 1, 4, 9 and 11.

Reference Examples 9 and 10, which were prepared by processes wherein the amount  
of the wax was 1 wt.% and 18 wt.%, respectively, both of which are outside the range of 1-13  
wt.% recited in present claim 4, showed inferior balance of fixing properties, offset-resistant  
properties and blocking resistant properties.

JP '247 describes a toner binder which is a combination of a polycondensation resin (A) and other resin (B). The polycondensation resin (A) can be any of a variety of resins set forth in paragraph [0005] which includes polyester, polyamide, polyurethane, polycarbonate, polyester polyamide, polyester polyurethane, etc. The other resin (B) is described in paragraph [0013] and can again be a variety of different resins, many of which are not styrene type resins. JP '247 does not disclose employing polyisocyanate as an additional component in the composition described therein. Hattori discloses a binder resin containing a resin having an epoxy group and optionally a conventional binder resin including polystyrene, a styrene-(meth)acrylate copolymer and a polyester (col. 2, lines 61-66).

To the extent that in view of JP '247 and Hattori, a polyester polyurethane is selected as the polycondensation resin (A) and an epoxy group containing styrene type resin is selected as the other resin (B), neither of JP '247 nor Hattori discloses or suggests the above noted features achievable in the presently claimed invention.

In view of the foregoing, Applicants respectfully submit that claim 4 is patentable over JP '247 in view of Hattori, and thus the rejection should be withdrawn. Additionally, claims 6 and 9 depend from claim 4, and thus are patentable over the cited references at least by virtue of their dependency.

b. Claim 3 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over JP '247 in view of Hattori, and further in view of U.S. Patent No. 6,992,150 to Nakanishi et al. (Nakanishi '150). Applicants respectfully submit that this rejection is moot because claim 3 has been canceled.

## **II. Conclusion**


From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any

questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at his earliest convenience.

Respectfully submitted,

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